FORT SAM HOUSTON ★ LACKLAND ★ RANDOLPH

JBSA LEGACY

WWW.JBSA.MIL JOINT BASE SAN ANTONIO APRIL 22, 2022

COURTESY GRAPHIC

Great Texas Airshow hosts Armed Services Blood Drive

502nd Air Base Wing Public Affairs

The Armed Services Blood Bank Center is in need of blood of all types. They will have a booth open at the airshow and will be standing at the ready for donations.

All blood collected assists in supporting all of our medical treatment facilities and wounded warriors around the world.

In an effort to keep donors and staff safe, please maintain distance between each other and donor center staff throughout the entire process, and avoid touching your face unless your hands are clean.

You can also make an appointment, instructions are below.

- Click or copy and paste https://www.militarydonor.com
- Click on locate a blood drive
- Under "search by sponsor," in the box for 'NAME' enter AIRSHOW then click 'enter'
- Choose the time you would like to donate
- Enter your information

STEM opportunities abound at Great Texas Airshow

502nd Air Base Wing Public Affairs

Science, Technology, Engineering, and Mathematics, or STEM, opportunities will be abundant at The Great Texas Airshow April 22-24 at Joint Base San Antonio-Randolph. The event is free and open to the public Saturday and Sunday. Entrance on Friday is reserved for schools and Department of Defense ID card holders only.

The STEM Expo will include interactive exhibits such as robots that individuals can operate, virtual reality simulators, games, and prosthetics. Individuals will also be able to engage in discussions and activities regarding STEM programs around San Antonio.

Among the exhibitors will be Air Force Gaming, Air Education and Training Command's 80th Anniversary Museum, and Sixteenth Air Force (Air Forces Cyber), as well as multiple Texas educational institutions, including University of the Incarnate Word, St. Mary's University, Texas A&M, University of Texas San Antonio, Our Lady of the Lake University, and the Palo Alto College Stem Center. The City of San Antonio Aviation Department will also be participating.

All exhibits will be located inside Hangar 42.

Exhibitors participating all three days:

- Girls Inc. Of San Antonio
- Alt-Bionics
- CyberTexas
- Palo Alto STEM Center
- AFRS Det. 1- Flight Simulator
- 902nd EOD
- National Museum of the Pacific War
- Lockheed Martin Cockpit Simulator
- Physics and Astro UTSA
- City of San Antonio Aviation Department
- Commemorative Air Force Flight Simulator
- Tuskegee Airmen Inc.

Friday's additional exhibitors:

- UTSA ISCS
- Air Force Gaming
- Sixteenth Air Force (Air Forces Cyber)
- Civil Engineer and Air Force GeoBase
- University of Incarnate Word
- Health & Kinesiology Texas A&M University-San Antonio
- Our Lady of the Lake University
- St. Mary's University
- Texas A&M Department of Computing and Cyber Security

Saturday's additional exhibitors:

- First Robotics
- LS4 3D Printing
- The Honey Breeze Collection
- Health & Kinesiology Texas A&M University-San Antonio
- Our Lady of the Lake University
- St. Mary's University
- Women in Aviation
- The Dee Howard Foundation
- Air Education and Training Command's 80th Anniversary Museum

Sunday's additional exhibitors:

- First Robotics
- The Dee Howard Foundation
- Air Education and Training Command's 80th Anniversary Museum
- The presence of specific exhibitors is expected, but not guaranteed.

JBSA LEGACY

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Everything advertised in this publication will be made available for purchase, use, or patronage without regard to race, color, religion, sex, national origin, age, marital status, physical handicap, political affiliation or any non-merit factor of the purchaser, user, or patron.

COURTESY GRAPHIC

Prohibited Items

The following items are prohibited at the Joint Base San Antonio 2022 Airshow at JBSA-Randolph:

- RVs, motorhomes, or trailers (5th wheels, camping trailers, boat trailers, etc.)
- Weapons (regardless of permit) includes firearms, knives, multi-tools, pepper spray, stun guns, etc.)
- Non-clear backpacks (small diaper bags OK)
- Remote control devices (cars, planes, drones)
- Ice chests/coolers**
- Pets (other than service animals)
- Glass containers
- Bicycles, rollers skates/roller blades, scooters, skateboards
- Segway-style human transporters
- Fireworks or flammable liquids
- Laser pointers
- Tents, portable/temporary awnings/cabanas
- Outside food or beverage**
- No smoking or vaping including e-cigarettes on flight-line or ramp areas

**Note: For Friday, April 22, 2022, these items are not prohibited for Junior ROTC units and local schools.

COURTESY PHOTOS

The primary mission of the Wings of Blue is to run the U.S. Air Force Academy's Basic Freefall Parachuting course, known as Airmanship 490 (AM-490).

USAFA Wings of Blue scheduled to perform

502nd Air Base Wing Public Affairs

The Wings of Blue have a long-standing commitment to personal and organizational excellence as well as a storied history of success. While the airspace that the Wings of Blue operates in is one of the busiest in the world, their drop zone is one of the safest.

The primary mission of the Wings of Blue is to run the U.S. Air Force Academy's Basic Freefall Parachuting course, known as Airmanship 490 (AM-490). The team serves primarily as jumpmasters and instructors, forging leaders of character through this unique training experience.

The Wings of Blue has both a demonstration team and a competition team. The demonstration team travels across the country to airshows, sporting events, and other venues to represent the Air Force in precision parachuting. Similarly, the competition team represents the Air Force by competing with teams from around the country in 6-way speed formations, 4-way relative work, 2-way free fly, and sport accuracy.

Each year, the Air Force Parachute Team performs in front of millions of spectators at national and international parachuting demonstrations. From their signature "Bomb Burst" maneuver at terminal velocity to mentoring and sharing experiences with a classroom in middle America, members of the Demonstration Team are proud to display world-class performances with unparalleled professionalism to the American public.

For more information on the Wings of Blue, visit https://www.usafa.edu/wings-of-blue/.

The Wings of Blue has both a demonstration team and a competition team.

U.S. Air Force Thunderbirds thrill spectators

502nd Air Base Wing Public Affairs

The U.S. Air Force Air Demonstration Squadron, the Thunderbirds, performs precision aerial maneuvers demonstrating the capabilities of Air Force high performance aircraft to people throughout the world. The squadron exhibits the professional qualities the Air Force develops in the people who fly, maintain and support these aircraft.

Objectives of the squadron are:

- To support Air Force recruiting and retention programs;
- To reinforce public confidence in the Air Force and to demonstrate to the public the professional competence of Air Force members;
- To strengthen morale and esprit de corps among Air Force members;
- To support Air Force community relations and people-to-people programs; and
- To represent the United States and its armed forces to foreign nations and to project international goodwill.

The Thunderbirds squadron is an Air Combat Command unit composed of eight pilots (including six demonstration pilots), four support officers, three civilians and more than 130 enlisted personnel performing in 25 career fields.

A Thunderbirds air demonstration is a mix of formation flying and solo routines. The four-aircraft diamond formation demonstrates the training and precision of Air Force pilots, while the solo aircraft highlight the maximum capabilities of the F-16 Fighting Falcon.

The pilots perform approximately 30 maneuvers in a demonstration. The entire show, including ground and air, runs about an hour and 15 minutes. The season lasts from March to November, with the winter months used to train new members.

For more information on the U.S. Air Force Thunderbirds, visit https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104552/thunderbirds/.

TECH. SGT. NICOLAS MYERS / AIR FORCE THUNDERBIRDS

Members of the United States Air Force Air Demonstration Squadron "Thunderbirds" perform a high show demonstration in Reno, Nevada, Sept. 19, 2021.

STAFF SGT. CORY BUSH / AIR FORCE THUNDERBIRDS

The U.S. Air Force Air Demonstration Squadron "Thunderbirds" perform at the California Capital Air Show in Mather, California, Sept. 26, 2021. Since 1953, the Thunderbirds team has served as America's premier air demonstration squadron, entrusted with the vital mission to recruit, retain and inspire past, present and future Airmen.

MV-22 Osprey boasts excellent maneuverability

SGT. BRENDAN CUSTER

A U.S. Marine Corps MV-22 Osprey with Marine Medium Tiltrotor Squadron 166, Special Purpose Marine Air-Ground Task Force – Crisis Response – Central Command, approaches a U.S. Marine Corps KC-130 for fuel during air-to-air refueling mission over the U.S. Central Command Area of Responsibility on Oct. 3, 2020.

502nd Air Base Wing Public Affairs

With the speed and range of a turboprop, the MV-22 Osprey has excellent maneuverability and the ability to carry 24 Marine combat troops twice as fast and five times farther than previous helicopters, enhancing Marine assault operations.

The V-22 Osprey is a multi-engine, dual-piloted, self-deployable, medium lift, vertical takeoff and landing (VTOL) tilt-rotor aircraft designed for combat, combat support, combat service support, and Special Operations missions worldwide. It will replace the Marine Corps' aged fleet of CH-46E and CH-53D medium lift helicopters.

Once airborne, the aircraft converts into a turboprop airplane. This happens because the nacelles rotate forward 90 degrees for horizontal flight. The MV-22B Osprey first deployed in 2007. The MV-22 also provides transport for White House staff as part of the HMX-1 presidential squadron based in Quantico, Virginia.

For more information on the MV-22 Osprey, visit https://www.aviation.marines.mil/About/Aircraft/Tilt-Rotor/.

F-35A Lightning II provides next-generation stealth

502nd Air Base Wing Public Affairs

The F-35A Lightning II is the U.S. Air Force's newest fifth-generation fighter. The Lightning II is a stealthy, multirole, all-weather air-to-air and surface attack fighter. It is designed to enable direct attack against the most heavily defended ground targets.

It will replace the U.S. Air Force's aging fleet of F-16 Fighting Falcons and A-10 Thunderbolt II's, which have been the primary fighter aircraft for more than 20 years, and bring with it an enhanced capability to survive in the advanced threat environment in which it was designed to operate.

With its aerodynamic performance and advanced integrated avionics, the F-35A will provide next-generation stealth, enhanced situational awareness, and reduced vulnerability for the United States and allied nations.

The conventional takeoff and landing (CTOL) F-35A gives the U.S. Air Force and allies the power to dominate the skies — anytime, anywhere. The F-35A is an agile, versatile, high-performance, 9g-capable multirole fighter that combines stealth, sensor fusion and unprecedented situational awareness.

CAPT. KIPPUN SUMNER / F-35A DEMO TEAM PUBLIC AFFAIRS

Maj. Kristin Wolfe, F-35A Lightning II Demonstration Team pilot and commander, takes off from Monterey Regional Airport after flying in the California International Air Show, Calif., Nov. 1, 2021.

The F-35A's advanced sensor package is designed to gather, fuse and distribute more information than any fighter in history, giving operators unprecedented situational awareness and a decisive advantage over all adversaries.

Its processing power, open architecture, sophisticated sensors, information fusion and flexible communication links make the F-35 an indispensable tool in future homeland defense, Joint and Coalition combat operations.

For more information on the F-35 Lightning II, visit https://www.388fw.acc.af.mil/F-35A-Demo-Team/.

JBSA officials answer frequently asked questions

502nd Air Base Wing Public Affairs

Officials from the 502nd Air Base Wing Public Affairs office answer the following questions about the Joint Base San Antonio Great Texas Airshow, which takes place this year at JBSA-Randolph April 23-24:

Q. How much are tickets?
A. Free! Any attempt to sell you admission tickets is a scam and we ask that you please report it at 502ABW.PA.official@US.AF.MIL or via Facebook Messenger to the JBSA account. The Great Texas Airshow is free and open to the general public.

Q. What identification is required to get on base?
A. There will be no identification requirements for visitors entering for the airshow. Distinguished visitors and vendors will be vetted prior to the Airshow.

Q. Will there be a drop-off location near the viewing areas? (i.e. drop off individuals who cannot walk far distances)
A. Shuttles will be provided from the general parking area to the airshow areas.

Q. Is there a schedule for the aerial performances?
A. The show starts at 11 a.m. and the Thunderbirds performance starts at 3 p.m. each day.

COURTESY GRAPHIC

Q. Will public roadways be closed during the Airshow?
A. Any road closures will be minimal. Traffic flow, base entry and parking information can be found at www.greattexasairshow.com/directions-parking-info/.

Q. Can a Department of Defense cardholder sponsor non-cardholders through during the Airshow?
A. The airshow is completely free and open to the public. Non-DOD cardholders will not need to be sponsored on the installation.

Q. Will hearing protection be provided?
A. Earplugs are not provided to attendees. Visitors are highly encouraged to bring their own for ease of use or comfort.

Q. Are seats available or can I bring my own foldable chairs?
A. Guests are encouraged to bring their own folding chairs.

Q. Can I bring my own food and drinks to the Airshow?
A. There will be a variety of food vendors on-site. Only food allowed that is for an infant or toddler.

Q. Can we bring alcohol onto the base?
A. Alcohol will be available for purchase at the airshow. It must be consumed on the premise and we ask that people have a plan for a designated driver to get them home safely.

QUESTIONS continues on 14

The B-52 Stratofortress continues to prove viability

502nd Air Base Wing Public Affairs

The B-52 is a long-range, heavy bomber that can perform a variety of missions. The bomber is capable of flying at high subsonic speeds at altitudes up to 50,000 feet (15,166.6 meters). It can carry nuclear or precision guided conventional ordnance with worldwide precision navigation capability.

For more than 40 years, B-52 Stratofortresses have been the backbone of the manned strategic bomber force for the United States. The B-52 is capable of dropping or launching the widest array of weapons in the U.S. inventory. This includes gravity bombs, cluster bombs, precision guided missiles and joint direct attack munitions.

Updated with modern technology, the B-52 will be capable of delivering the full complement of joint developed weapons and will continue into the 21st century as an important element of our nation's defenses. Current engineering analyses show the B-52's life span to extend beyond the year 2040.

The B-52A first flew in 1954, and the B model entered service in 1955. A total of 744 B-52s were built with the last, a B-52H, delivered in October 1962. The first of 102 B-52H's was delivered to Strategic Air Command in May 1961.

The H model can carry up to 20 air launched cruise missiles. In addition, it can carry the conventional cruise missile that was launched in several contingencies during the 1990s, starting with Operation Desert Storm and culminating with Operation Iraqi Freedom.

The aircraft's flexibility was evident in Operation Desert Storm and again during Operation Allied Force. B-52s struck wide-area troop concentrations, fixed installations and bunkers, and decimated the morale of Iraq's Republican Guard. From Sept. 2 to 3, 1996, two B-52H's struck Baghdad power stations and communications facilities with 13 AGM-86C conventional air launched cruise missiles, or CALCMs, as part of Operation Desert Strike. At that time, this was the longest distance flown for a combat mission involving a 34-hour, 16,000 statute mile round trip from Barksdale Air Force Base, Louisiana.

In 2001, the B-52 contributed to the success in Operation Enduring Freedom, providing the ability to loiter high above the battlefield and provide close air support through the use of precision guided munitions.

COURTESY PHOTO

The B-52 Stratofortress is scheduled to be seen at the Joint Base San Antonio Great Texas Airshow April 23-24 at JBSA-Randolph.

The B-52 also played a role in Operation Iraqi Freedom. On March 21, 2003, B-52Hs launched approximately 100 CALCMs during a night mission.

Only the H model is still in the Air Force inventory and is assigned to the 5th Bomb Wing at Minot Air Force Base North Dakota, and the 2nd Bomb Wing at Barksdale Air Force Base, Louisiana, which fall under Air Force Global Strike Command. The aircraft is also assigned to the Air Force Reserve Command's 307th Bomb Wing at Barksdale Air Force Base.

For more information on the B-52 Stratofortress, visit https://www.barksdale.af.mil/About-us/Fact-Sheets/Article/637065/b-52-stratofortress/.

C-17 Globemaster III carries cargo loads around the world

502nd Air Base Wing Public Affairs

The C-17 Globemaster III is the most flexible cargo aircraft to enter the airlift force. The C-17 is capable of rapid strategic delivery of troops and all types of cargo to main operating bases or directly to forward bases in the deployment area. The aircraft can perform tactical airlift and airdrop missions and can transport litters and ambulatory patients during aeromedical evacuations.

The inherent flexibility and performance of the C-17 force improve the ability of the total airlift system to fulfill the worldwide air mobility requirements of the United States.

The ultimate measure of airlift effectiveness is the ability to rapidly project and sustain an effective combat force close to a potential battle area.

Threats to U.S. interests have changed in recent years, and the size and weight of U.S.-mechanized firepower and equipment have grown in response to improved capabilities of potential adversaries. This trend has significantly increased air mobility requirements, particularly in the area of large or heavy outsize cargo.

TECH. SGT. SHANE CUOMO

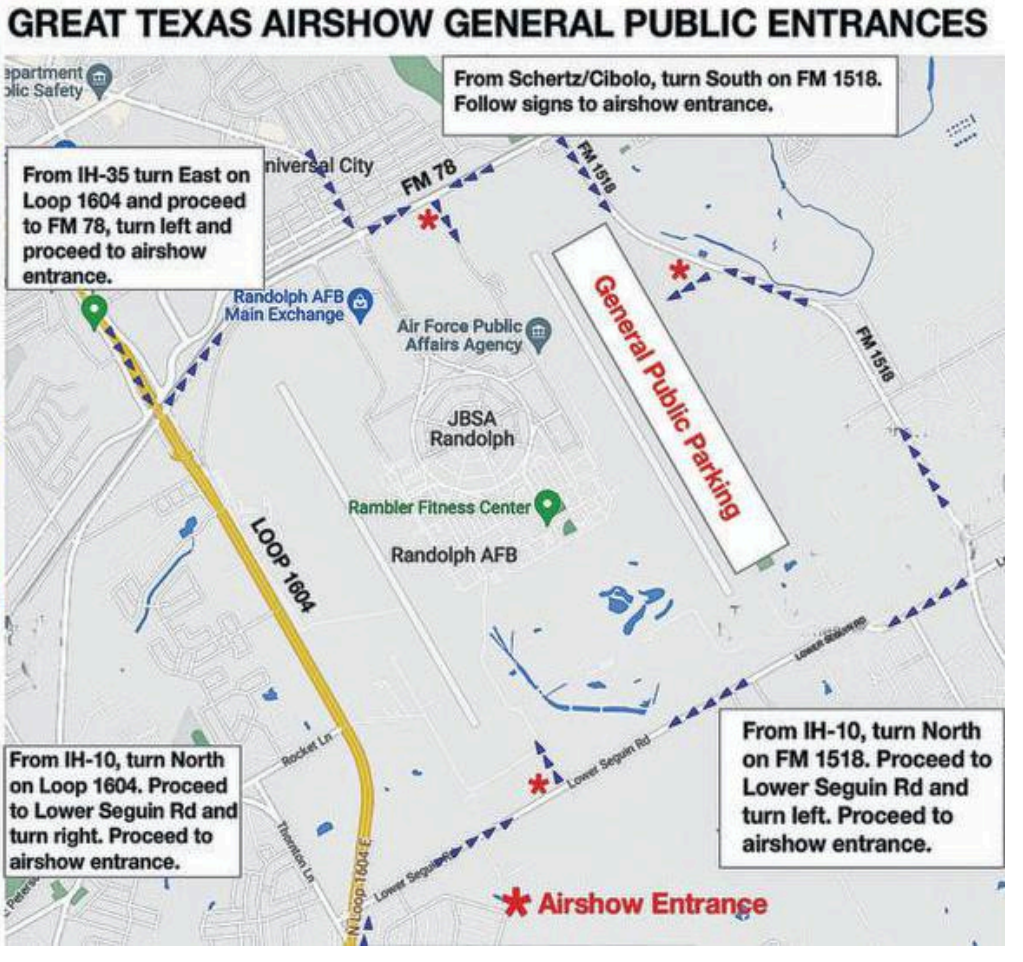
Staff Sgt. John Eller conducts pre-flights check on his C-17 Globemaster III prior to taking off from Hickam Air Force Base, Hawaii.

As a result, newer and more flexible airlift aircraft are needed to meet potential armed contingencies, peacekeeping or humanitarian missions worldwide. The C-17 is capable of meeting today's demanding airlift missions.

The aircraft is operated by a crew of three (pilot, co-pilot and loadmaster), reducing manpower requirements, risk exposure and long-term operating costs. Cargo is loaded onto the C-17 through a large aft ramp and door system that accommodates virtually all of the Army's air-transportable equipment such as a 69-ton M1 Abrams main battle tank, armored vehicles, trucks and trailers.

Additionally, the cargo floor has rollers that can be flipped from a flat floor to accommodate wheeled or tracked vehicles to rollerized conveyers to accommodate palletized cargo. The C-17 is designed to airdrop 102 paratroopers with their accompanying equipment.

For more information on the C-17 Globemaster III, visit https://www.af.mil/About-Us/Fact-Sheets/Display/Article/1529726/c-17-globemaster-iii/.



Directions to The Great Texas Airshow at JBSA-Randolph April 23-24

DIRECTIONS

Joint Base San Antonio-Randolph is located just 20 minutes from downtown San Antonio. You'll find the base on Highway 78 in Schertz, Texas, 78148.

From Austin

Take I-35 S to 1604 West, turn left and continue to Highway 78, then turn left and follow directional signs to JBSA-Randolph.

From Corpus Christi

Take I-37 North towards San Antonio. Merge onto I-10 West then I-35 North towards Austin. Continue to 1604 East. Turn right and continue to Highway 78 then turn left and follow directional signs to JBSA-Randolph.

From Dallas

Take I-35 E to Loop 1604 West. Turn left and continue to Highway 78 then turn left and follow directional signs to JBSA-Randolph.

From Houston

Take I-10 West to Loop 1604 East. Turn right and continue to Lower Seguin Road, then turn right and follow directional signs to JBSA-Randolph.

From Laredo

Take I-35 North to Loop 1604 East. Turn right and continue to Highway 78 and follow directional signs to JBSA-Randolph.

The U.S. Air Force Thunderbirds will perform at 3 p.m. during the Great Texas Airshow April 23-24 at Joint Base San Antonio-Randolph.

STAFF SGT. BRIAN FERGUSON

QUESTIONS

From page 9

Q. Will spectators be allowed to take photos and video?
A. Of course! We encourage all visitors to take photos and videos throughout the event.

Q. Will there be sitting areas, restrooms, etc. for people with disabilities?
A. There will also be handicap accessible bathrooms available. There are no designated seating areas.

Q. Are pets allowed?
A. Only service animals are allowed at the airshow.

Q. If we are an exhibitor, performer or part of the static display group, are we allowed to sell memorabilia?
A. The master concessionaire has exclusivity for merchandise sales. If your unit/ organization wants to earn money they can volunteer to work for the master concessionaire to man a food booth. Please send an email to 502abw.pa.official@us.af.mil for more info.

Q. Do beer garden tickets come with parking near the flightline?
A. Beer Garden ticket sales do NOT include parking. ALL Airshow guests will be required to park in the general parking areas.

Q. Are beer garden purchasers allowed to have their dependents sit with them?
A. There are under 21 seats available for purchase in the beer garden. ALL reserved seating must be purchased.

Q. If errors or issues with eTIX, who is the POC for that?
A. On the eTIX customer confirmation email, there is a Support phone number and email address where the customer can send in requests for refunds, exchanges, etc.

Q. Do you have T-shirts, caps, etc., for sale? If so, where can they be purchased?
A. Airshow novelty items will be available for purchase at multiple locations on the Airshow site.

Q. How is handicap parking for the general public is being handled?
A. The first two rows in general parking will be reserved for handicap parking (international symbol for handicap must be displayed on placard and/or plate).

Q. Will there be a motorized wheelchair (scooters, etc.) drop-off location and access to viewing areas?
A. There will be ADA compliant vans available to transport mobility impaired spectators to the entry control point

Q. Is there a special entrance for military personnel?
A. Anyone who has base access can enter near Hangar 40. Due to limited parking on base, we encourage everyone to use the general parking area.

Q. Are camera backpacks or sling bags allowed items?
A. No. Please view the prohibited items list at www.greattexasairshow.com

Q. Can we bring a wagons to carry folding chairs and umbrellas?
A. Wagons are authorized, but umbrellas are not. Please see the list of prohibited items at www.greattexasairshow.com

Q. Can we drive our RV/ motorhomes onto the base for the airshow and park overnight?
A. RVs, motorhomes, or trailers (5th wheels, camping trailers, boat trailers, etc.) are prohibited items for the airshow.

The Great Texas Airshow offers static aircraft on display

502nd Air Base Wing Public Affairs

The Great Texas Air Show at Joint Base San Antonio-Randolph offers a wide range of aircraft on static display.

T-38 TALON

The T-38 Talon is a twin-engine, high-altitude, supersonic jet trainer used in a variety of roles because of its design, economy of operations, ease of maintenance, high performance and exceptional safety record. Air Education and Training Command is the primary user of the T-38 for joint specialized undergraduate pilot training. Air Combat Command, Air Force Materiel Command and the National Aeronautics and Space Administration also use the T-38A in various roles.

T-1A JAYHAWK

The T-1A Jayhawk is a medium-range, twin-engine jet trainer used in the advanced phase of specialized undergraduate pilot training for students selected to fly airlift or tanker aircraft. It is also used to support navigator training for the Air Force, Navy, Marine Corps and international services. The first T-1A was delivered to Reese Air Force Base, Texas, in January 1992, and student training began in 1993.

F-16 FIGHTING FALCON "RED TAIL"

The F-16 Fighting Falcon is a compact, multi-role fighter aircraft. It is highly maneuverable and has proven itself in air-to-air combat and air-to-surface attack. It provides a relatively low-cost, high-performance weapon system for the United States and allied nations.

The Red Tail aircraft honors the Tuskegee Airmen who flew P-51 Mustangs with tails painted bright red during World War II under the crest of the 332nd Fighter Group.

BT-13 VALIANT

The Valiant was the basic trainer most widely used by the U.S. Army Air Forces during World War II. It represented the second of the three stages of pilot training — primary, basic and advanced. Compared with the primary trainers in use at the time, it was considerably more complex. The BT-13 not only had a more powerful engine, it was also faster and heavier. In addition, it required the student pilot to use two-way radio communications with the ground and to operate landing flaps and a two-position variable pitch propeller.

GENERAL VIEWING AREA

P-51C MUSTANG

The P-51, also called the Mustang, is a single-seat, single-engine fighter aircraft originally designed and produced by North American Aviation for the British Royal Air Force and later adopted by the U.S. Army Air Forces. The P-51 is widely regarded as the finest all-around piston-engine fighter of World War II to be produced in significant numbers.

EC145

The EC145, certified under the name BK117 C-2, is a twin-engine, multi-purpose helicopter of the 3- to 4-ton class with up to 11 seats for pilot/s and passengers.

CJ-6

The CJ-6 (basic trainer aircraft) is an all-original Chinese design that is commonly mistaken for a Yak-18A. Its predecessor, the Nanchang CJ-5, was a license-built version of the Yak-18. However, advancements in pilot training brought a need for a new aircraft with improved performance and a tricycle landing gear. When the Soviet Union developed the Yak-18A, PLAAF engineers decided that its performance and design would not suit China's needs.

JSX003

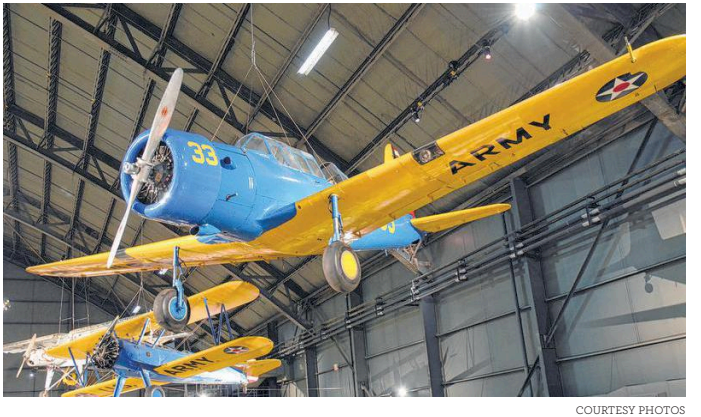
This aircraft is a modified SubSonex Jet, otherwise known as JSX003. The SubSonex is an Experimental Jet that comes as a kit from the Sonex factory in Oshkosh, Wisconsin. It weighs 500 lbs., goes up to 300 mph, and it is fully aerobatic.

JELLY BELLY CADET

The Jelly Belly Cadet is an 800-pound Interstate Cadet with a 37-foot wingspan. The plane's horizontally opposed four-cylinder engine can generate 90 horsepower and a G-force ranging from -3 to +5.

BE-18

The Beechcraft Model 18 is a 6—11 seat, twin-engine, low-wing, conventional-gear aircraft that was manufactured by the Beech Aircraft Corporation of Wichita, Kansas. This model saw military service during and after World War II in a number of versions including the United States Army Air Forces C-45 Expeditor, AT-7 Navigator, AT-11 Kansan; and for the United States Navy, UC-45J Navigator and the SNB-1 Kansan.



COURTESY PHOTOS

Vultee BT-13B Valiant

North American P-51D Mustang

T-33 ACEMAKER

The T-33 Shooting Star (or T-Bird) is an American subsonic jet trainer. It was produced by Lockheed and made its first flight in 1948. The T-33 was developed from the Lockheed P-80/F-80 starting as TP-80C/TF-80C in development, then designated T-33A. It was used by the U.S. Navy initially as TO-2, then TV-2, and after 1962, T-33B.

RH MX2

The MX2 aerobatic aircraft is an all-carbon fiber, two-place, high-performance aircraft with maneuverability that has never before been available in a two-place aerobatic airplane. The MX2 is a well-mannered aircraft that is both durable and easy to fly. The MX2 offers the capability of being a comfortable two seat, fast cross — country sports plane with a cruising speed in excess of 200 knots and up to 900 miles of range.

AIRCRAFT continues on 16

AIRCRAFT

From page 15 Aircraft

SOUTH RAMP (EAST TO WEST)

HC-130

The HC-130 is an extended-range, search and rescue/combat search and rescue version of the C-130 Hercules military transport aircraft, with two different versions operated by two separate services in the U.S. armed forces.

The HC-130H Hercules and HC-130J Super Hercules versions are operated by the United States Coast Guard in a SAR and maritime reconnaissance role.

KC-135 STRATOTANKER

The KC-135 Stratotanker provides the core aerial refueling capability for the United States Air Force and has excelled in this role for more than 60 years. This unique asset enhances the Air Force's capability to accomplish its primary mission of global reach. It also provides aerial refueling support to Air Force, Navy, Marine Corps and allied nation aircraft. The KC-135 is also capable of transporting litter and ambulatory patients using patient support pallets during aeromedical evacuations.

E-3 SENTRY

The E-3 Sentry is an airborne warning and control system, or AWACS, aircraft with an integrated battle management command and control, or BMC2, surveillance, target detection, and tracking platform. The aircraft provides an accurate, real-time picture of the battlespace to the Joint Air Operations Center. AWACS provides situational awareness of friendly, neutral and hostile activity, command and control of an area of responsibility, battle management of theater forces, all-altitude and all-weather surveillance of the battle space, and early warning of enemy actions during joint, allied, and coalition operations.

C-5M SUPER GALAXY

The C-5M Super Galaxy is a strategic transport aircraft and is the largest aircraft in the Air Force inventory. Its primary mission is to transport cargo and personnel for the Department of Defense. The C-5M is a modernized version of the legacy C-5 designed and manufactured by Lockheed Martin. Currently, the U.S. Air Force owns and operates 52 C-5B/C/M. They are stationed at Dover Air Force Base, Delaware; Travis Air Force Base, California; Lackland Air Force Base, Texas; and Westover Air Reserve Base, Massachusetts.

The C-5M Super Galaxy is equipped with five sets of landing gear, 28 wheels, four General Electric CF6-80C2-L1F (F-138) commercial engines, and a state-of-the-art maintenance diagnostics system. It can carry oversized cargo over intercontinental ranges and can take off and land on relatively short runways.

COURTESY PHOTO

KC-135 Stratotanker

F-16 VIPER

Today, the U.S. Air Force, Air Force Reserve, Air National Guard, U.S. Navy, and NASA operate over 2,200 Vipers, in addition to 25 coalition countries. These remarkable aircraft perform virtually every mission set there is; from experimental testing to pilot training and everything in between. The Viper's versatility, low operating costs, and adaptability have kept it at the forefront of America's military power.

B-52 STRATOFORTRESS

The B-52 Stratofortress is a long-range, heavy bomber that can perform a variety of missions. The bomber is capable of flying at high subsonic speeds at altitudes up to 50,000 feet (15,166.6 meters). It can carry nuclear or precision guided conventional ordnance with worldwide precision navigation capability.

In a conventional conflict, the B-52 can perform strategic attack, close-air support, air interdiction, offensive counter-air and maritime operations.

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C-17 GLOBEMASTER III

The C-17 Globemaster III is the most flexible cargo aircraft to enter the airlift force. The C-17 is capable of rapid strategic delivery of troops and all types of cargo to main operating bases or directly to forward bases in the deployment area. The aircraft can perform tactical airlift and airdrop missions and can transport litters and ambulatory patients during aeromedical evacuations. The inherent flexibility and performance of the C-17 force improve the ability of the total airlift system to fulfill the worldwide air mobility requirements of the United States.

KC-46A PEGASUS

The KC-46A is the first phase in recapitalizing the U.S. Air Force's aging tanker fleet. With greater refueling, cargo and aeromedical evacuation capabilities compared to the KC-135, the KC-46A will provide next generation aerial refueling support to Air Force, Navy, Marine Corps and partner-nation receivers.

AC-130W STINGER II

The AC-130W Stinger II primary missions are close air support and air interdiction. Close air support missions include troops in contact, convoy escort and point air defense. Air interdiction missions are conducted against preplanned targets or targets of opportunity and include strike coordination and reconnaissance. The AC-130W Stinger II Precision Strike Package modification provides ground forces an expeditionary, persistent direct-fires platform that delivers precision low-yield munitions, ideally suited for close air support and urban operations.

A-10 THUNDERBOLT II

The A-10C Thunderbolt II is the first Air Force aircraft specially designed for close air support of ground forces. They are simple, effective and survivable twin-engine jet aircraft that can be used against light maritime attack aircraft and all ground targets, including tanks and other armored vehicles.

F-22 RAPTOR

The F-22 Raptor is the Air Force's newest fighter aircraft. Its combination of stealth, supercruise, maneuverability, and integrated avionics, coupled with improved supportability, represents an exponential leap in warfighting capabilities. The Raptor performs both air-to-air and air-to-ground missions allowing full realization of operational concepts vital to the 21st century Air Force.

F-15 EAGLE

The F-15 Eagle is an all-weather, extremely maneuverable, tactical fighter designed to permit the Air Force to gain and maintain air supremacy over the battlefield.

The Eagle's air superiority is achieved through a mixture of unprecedented maneuverability and acceleration, range, weapons and avionics. It can penetrate enemy defense and outperform and outfight any current enemy aircraft.

F/A-18 SUPER HORNET

The F/A-18 Hornet became the nation's first all-weather fighter and attack aircraft, and was designed for traditional strike applications such as interdiction and close air support without compromising its fighter capabilities. The F/A-18 A-D is employed in Marine Corps fighter attack squadrons, U.S. Navy and Marine Corps Reserve squadrons, the Navy Flight Demonstration Team (Blue Angles), and various other fleet support roles.

F-35A LIGHTNING II

The F-35A is the U.S. Air Force's latest fifth-generation fighter. It will replace the U.S. Air Force's aging fleet of F-16 Fighting Falcons and A-10 Thunderbolt II's, which have been the primary fighter aircraft for more than 20 years, and bring with it an enhanced capability to survive in the advanced threat environment in which it was designed to operate.

E-2 HAWKEYE

The E-2 Hawkeye is the Navy's all-weather, carrier-based tactical battle management airborne early warning, command and control aircraft. The E-2 is a twin-engine, five-crewmember, high-wing turboprop aircraft with a 24-foot diameter radar rotodome attached to the upper fuselage. The Hawkeye provides all-weather airborne early warning, airborne battle management and command and control functions for the Carrier Strike Group and Joint Force Commander. Additional missions include surface surveillance coordination, air interdiction, offensive and defensive counter air control, close air support coordination, time critical strike coordination, search and rescue airborne coordination and communications relay.

F-15E STRIKE EAGLE

The F-15E Strike Eagle is a dual-role fighter designed to perform air-to-air and air-to-ground missions. An array of avionics and electronics systems gives the F-15E the capability to fight at low altitude, day or night and in all weather.

F-15EX

The F-15EX is a ready-now replacement for the F-15C that includes best-in-class payload, range and speed.

COURTESY PHOTOS

F-16 Fighting Falcon

F-22 Raptor

Designed to deliver value to the U.S. Air Force, the F-15EX will be a backbone fighter for the service — not just today, but for the next several decades. It includes fly-by-wire flight controls, new weapons stations, new electronic warfare suite, advanced radar and computer, conformal fuel tanks and a strengthened airframe. The improved F-15EX also features a deep magazine that will allow it to carry a load of advanced weapons — yet with a 28 percent larger payload than the F-15E.

T-6A TEXAN II

The T-6A Texan II is a single-engine, two-seat primary trainer designed to train Joint Primary Pilot Training, or JPPT, students in basic flying skills common to U.S. Air Force and Navy pilots. The T-6A has a Pratt & Whitney Canada PT6A-68 turbo-prop engine that delivers 1,100 horsepower. Because of its excellent thrust-to-weight ratio, the aircraft can perform an initial climb of 3,100 feet (944.8 meters) per minute and can reach 18,000 feet (5,486.4 meters) in less than six minutes.

MV-22B OSPREY

The MV-22 Osprey's mission for the U.S. Marine Corps is the transportation of troops, equipment, and supplies from ships and land bases for combat assault and assault support.

The MV-22B Osprey is a tiltrotor V/STOL aircraft designed as the medium-lift replacement for the CH-46E Sea Knight assault support helicopter. The Osprey can operate as a helicopter or a turboprop aircraft and offers twice the speed, six times the range, and three times the payload of the CH-46E.

TG-15A

The TG-15A (Schempp-Hirth Duo Discus) is a conventional two-place high performance sailplane with tandem seating used by 94 FTS Advanced Soaring for cross-country training. The TG-15A is commonly known as "the white glider" or the "Duo" in the civilian community. Glider cross-country soaring competitions are flown at the regional and national level in the TG-15A. The

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Schempp-Hirth Flugzeugbau Aircraft Corporation of Kirchheim, Germany, manufactures the Duo Discus (Air Force designation TG-15A).

BONANZA

The classic Beechcraft Bonanza was introduced in 1947 and is still built today by Textron Aviation. The four-place aircraft sported all-metal construction and retractable landing gear for the sophisticated or executive pilot. Initially designed with the distinctive butterfly or V tail—a conventional tail model was offered too—it was the basis for later Beech aircraft.

RV-7A

The RV-7/7A is an all-around sport airplane, with excellent cross-country capability, fine aerobatic qualities and superior handling. A typical RV-7 can hold two FAA standard pilots, 100 pounds of baggage and full tanks of 42 gallons. At the aerobatic gross weight of 1600 pounds, the RV-7/7A complies with the +6/-3G standards of the FAA's Aerobatic Category and can still carry two people, making it possible for a new pilot to get aerobatic instruction before he or she starts rolling and looping.

T-41 MESCALERO

The T-41 Mescalero is a military version of the Cessna 172 that was fitted with a larger engine and variable pitch propeller. The Mescalero has been used by the United States Air Force and Army as well as the armed forces of various other countries as a pilot training aircraft. The Cessna O-2 Skymaster, nicknamed "Oscar Deuce," is a military version of the Cessna 337 Super Skymaster, used for forward air control and psychological operations by the US military between 1967 and 2010.

P-8A POSEIDON

The P-8A Poseidon is the U.S. Navy's multi-mission maritime patrol and reconnaissance aircraft. The P-8A efficiently conducts anti-submarine warfare, anti-surface warfare, intelligence, surveillance, reconnaissance, and humanitarian response. These capabilities are enhanced through secure, interoperable, net-ready systems. While the aircraft is also equipped with high-quality weapon systems, it also has an open architecture to allow for expansion.

C-40B/C

The C-40 B/C provides safe, comfortable and reliable transportation for U.S. leaders to locations around the world. The C-40B's primary customers are the combatant commanders, and the C-40C customers include members of the Cabinet and Congress. The aircraft also performs other operational support missions. The C-40 B/C is based upon the commercial Boeing 737-700 business jet. The body of the C-40 is identical to that of the Boeing 737-700, but has winglets.

AT-37 DRAGONFLY / SUPER TWEET

The Cessna A-37 Dragonfly, or Super Tweet, is an American light attack aircraft developed from the T-37 Tweet basic trainer in the 1960s and 1970s by Cessna of Wichita, Kansas. The A-37 was introduced during the Vietnam War and remained in peacetime service afterward.

TB-30 EPSILON

The TB-30 Epsilon is a single-engine basic military trainer aircraft designed and developed by France-based EADS Socata for the French Air Force. It is a tandem two-seater with a metal airframe.

T-33A SHOOTING STAR

The two-place T-33 jet was designed for training pilots already qualified to fly propeller-driven aircraft. It was developed from the single-seat F-80 fighter by lengthening the fuselage about three feet to accommodate a second cockpit.

A-26 COUNTER INVADER

The Counter Invader was a highly modified version of the Douglas A-26 Invader, a World War II attack bomber. Redesignated as the B-26 in 1948, the Invader served again during the Korean War (1950-1953), mainly as a night intruder against North Korean supply lines. It was removed from service in 1958, but in 1961 the USAF recalled many Invaders for use as tactical bombers in Southeast Asia. Combat duty and two decades of wear took their toll, and in 1964 the B-26s again were removed from service.

UH-1N HUEY

The UH-1N is a light-lift utility helicopter used to support various missions. The primary missions include airlift of emergency security forces, security and surveillance of off-base nuclear weapons convoys, and distinguished visitor airlift. Other uses include: disaster response operations, search and rescue, medical evacuation, airborne cable inspections, support to aircrew survival school, aerial testing, routine missile site support and transport.

The UH-1N has a crew of three (pilot, co-pilot and flight engineer) and is capable of flight in instrument and nighttime conditions. When configured for passengers, the UH-1N can seat up to 13 people.

COURTESY PHOTOS

HH-60 Black Hawk

P-39 AIRCOBRA

HH-60 BLACK HAWK

The Black Hawk UH/HH-60 is the Army's utility tactical transport helicopter. It provides air assault, general support, aeromedical evacuation, command and control, and special operations support to combat, stability and support operations. This versatile Black Hawk helicopter has enhanced the Army's overall mobility due to dramatic improvement in troop and cargo lift capacity. It will serve as the Army's utility helicopter in the Future Force. There are multiple versions of the UH-60 Black Hawk, including the UH-60M and the UH-60V.

P-39 AIRCOBRA

The P-39 was one of America's first-line pursuit planes in December 1941. It made its initial flight in April 1939 at Wright Field, Ohio, and by the time of the Pearl Harbor attack, nearly 600 had been built. Its unique engine location behind the cockpit caused some pilot concern at first, but experience showed that this was no more of a hazard in a crash landing than with an engine located forward of the cockpit.

C-47

The C-47 could carry up to 6,000 pounds of cargo as a supply plane. It could also hold a fully assembled jeep or a 37 mm cannon. As a troop transport, it carried 28 soldiers in combat gear. As a medical airlift plane, the C-47 could accommodate 14 stretcher patients and three nurses. Seven basic versions were built, and the aircraft was given at least 22 designations, including the AC-47D gunship, the EC-47 electronic reconnaissance aircraft, the EC-47Q antiaircraft systems evaluation aircraft and the C-53 Skytrooper. The C-47 featured strengthened floors, bucket seats, large loading doors, and a pair of Pratt & Whitney R-1830 engines of 1,200 horsepower each.

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AT-6

The North American Aviation T-6 Texan was a single-engine advanced trainer aircraft used to train pilots of the U.S. Army Air Forces, U.S. Navy, Royal Air Force and other air forces of the British Commonwealth during World War II and into the 1950s. Designed by North American Aviation, the T-6 is known by a variety of designations depending on the model and operating air force.

SCORPION

The Scorpion aircraft is capable of performing air defense, irregular warfare, border patrol, maritime security, disaster relief and counter-drug missions. The aircraft features an all-composite airframe and structure powered by twin turbofan engines.

SNJ-4

The SNJ-4 is a derivative of a trainer ordered by the U. S. Army in 1935 and designated as the BT-9 (Basic Trainer No. 9). North American Aviation entered the aircraft designed by J. H. "Dutch" Kindelberger, J. L. Atwood and H. R. Raynor-in the U.S. Army Basic Training Competition in 1935. The North American entry was ordered into production as the BT-9 and was followed by the BT-9A, B, and C.

B-25 MITCHELL

The B-25 is a twin-engine medium bomber with a gull wing mounted at mid-fuselage; twin vertical fins and rudders; tricycle landing gear; power plants: two Wright R-2600-13 radial engines turning three-blade, Hamilton Standard full-feathering propellers, 3.8 meters (12 foot, 7 inches) in diameter.

The distinctive twin vertical fin and rudder layout on the B-25 made the Mitchell rock solid and controllable if an engine quit, which occurred frequently in combat.

T-34 MENTOR

During World War II, the U.S. Navy and Army Air Forces operated common training aircraft, and the practice continued into the 1950s when the sea service and the recently created U.S. Air Force both chose the Beech Model 45 as a primary trainer. The Navy operated the T-34B for more than 20 years, accumulating almost 100,000 flight hours per year.

P-63 KINGCOBRA

The P-63 originated from the XP-39E prototype and retained the Bell trademark tricycle landing gear as well as the automobile-type cockpit doors and engine behind the cockpit. The 37mm cannon that fired through the propeller hub was kept as well as the two synchronized .50 caliber machine guns in the nose and two additional .50 caliber guns located in under-wing pods, similar to the P-39Q.

P-51D MUSTANG

The P-51 Mustang was among the best and most well-known fighters used by the U.S. Army Air Forces during World War II. Possessing excellent range and maneuverability, the P-51 operated primarily as a long-range escort fighter and also as a ground attack fighter-bomber. The Mustang served in nearly every combat zone during WWII, and later fought in the Korean War.

T-6G TEXAN

The T-6 Texan, built by North American Aviation, was designed as an advanced trainer. It was intended to be a transition between basic trainers and first-line tactical aircraft. The T-6 was used to train most of the Allied pilots that flew in World War II. It is known by a variety of different names, depending on who operated it. The USAAC called it the "AT-6," The USN called it the "SNJ," and the RAF called it the "Harvard."

B-29 SUPERFORTRESS

The Boeing B-29 Superfortress was the most sophisticated propeller-driven bomber of World War II and the first bomber to house its crew in pressurized compartments. Although designed to fight in the European theater, the B-29 found its niche on the other side of the globe. In the Pacific, B-29s delivered a variety of aerial weapons: conventional bombs, incendiary bombs, mines, and two nuclear weapons. On Aug. 6, 1945, a Martin-built B-29-45-MO dropped the first atomic weapon used in combat on Hiroshima, Japan.

A-20 HAVOC

The U.S. Army operated a number of A-20 bombers as well beginning in mid-1941. The first combat situation they saw, unfortunately, was the Japanese attack on Pearl Harbor in the U.S. Territory of Hawaii where two A-20 bombers were destroyed on the ground at Hickam Field. The American A-20 bombers were nicknamed Havoc following British naming scheme shortly after US entered WW II.

TF-51D

The TF-51D was originally configured as the P-51, sporting a Packard V-1650-7 engine and consigned to low-level reconnaissance and fighter-bomber service. Long after fighter jets took over the stage, the P-51 remained. The wartime Mustangs were lifesavers, constructed with a two-section fuselage of aluminum and a unique radiator whose exhaust actually produced jet thrust.